

REMARKS

Claims 29 and 38 are pending in the application. Claims 29 and 38 have been amended to further clarify the presently-claimed invention. Support for the amendments to claims 29 and 38 can be found at *inter alia*, the Examples section [0067] – [0103] in the US Patent Application Publication No. 2007/0042344. Therefore, the present application provides support for the advantageous effects of treating premature NK cells with a combination of IL-15 protein with ferritin H gene.

The Sequence Listing as submitted herewith removes former SEQ ID NO:49 submitted on July 28, 2009. The new SEQ ID NO:49 is the former nucleic acid sequence of SEQ ID NO:50.

No new matter has been introduced, and entry of the above revised claims is respectfully requested.

Telephonic Interview of May 26, 2010

Applicant's representative thanks the Examiner for courtesies extended during the telephonic interview held on May 26, 2010. The nature of the Office action was further clarified during the interview.

Priority

During the interview, the Examiner indicated that the Office has received the certified priority document Korean patent application no. 10-2004-0004308.

Drawings

During the interview, the Examiner indicated that the corrected color drawings were accepted by the Patent Office.

Specification (New Matter)

The Examiner indicated that the amino acid sequence of SEQ ID NO:49 in the Sequence Listing submitted on July 28, 2009 constitutes new matter and is required to be canceled from the Specification. While Applicant does not agree with the Examiner regarding this issue, a revised sequence listing is submitted herewith in which the former SEQ ID NO:49 is no longer

an amino acid sequence, but the nucleic acid sequence of former SEQ ID NO:50. Accordingly, it is believed that this rejection has been overcome.

Rejection Under 35 U.S.C. §112, first paragraph (New Matter)

Claims 29 and 38 have been rejected under 35 U.S.C. §112, first paragraph for failing to comply with the written description requirement. The Examiner believes that use of the protein to treat the cells is considered to be new matter. Applicant traverses this rejection. Reconsideration and withdrawal thereof are respectfully requested.

During the telephonic interview held on May 26, 2010, the Examiner indicated that claims directed to using a combination of Ferritin H chain gene and IL-15 protein would not constitute new matter. The presently claimed invention is directed to using Ferritin H chain gene and IL-15 protein. Accordingly, this rejection has been overcome.

Rejection Under 35 U.S.C. §112, first paragraph

Claims 29 and 38 have been rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the enablement requirement. The Examiner criticizes the claim language, in which the preamble states differentiation of “a stem cell to a natural killer cell.” Applicant traverses this rejection. Reconsideration and withdrawal thereof are respectfully requested.

It is believed that the presently claimed invention directed to treating premature NK cells is fully enabled by the Specification.

Declaration Under 37 CFR 1.132

A revised signed Declaration by Dr. Inpyo Choi is attached for the Examiner’s review, which supports the patentability of the claimed invention.

Conclusion

It is believed that the application is now in condition for allowance. Applicant requests the Examiner to issue a notice of Allowance in due course. The Examiner is encouraged to contact the undersigned to further the prosecution of the present invention.

The Commissioner is hereby authorized to charge JHK Law's Deposit Account No. **502486** for such fees required under 37 CFR §§ 1.16 and 1.17 and to credit any overpayment to said Deposit Account No. **502486**.

Respectfully submitted,

JHK Law

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